- 1. A polysaccharide having a phosphorylcholine group represented by the following general formula.
- 5 (1)

- 2. A polysaccharide having a phosphorylcholine group represented by the following general formulas (2)-(10).
- 10 (2)

(3)

SUGAR—O—
$$CH_2$$
— NH — CH_2 — CH_2 — O — M
 CH_2 — N
 N
 N

(4)

15

(6)

SUGAR—O
$$NH$$
— CH_2
 NH
 $N+$
 $N+$

5 (7)

SUGAR—O—
$$CH_2$$
 $N+$
 $N+$

(8)

(9)

10

(10)

5

10

In the general formulas (2)-(7) n denotes an integer 1-22, m denotes an integer 1-20, and SUGAR denotes a polysaccharide.

In general formulas (8)-(10), R1, R2, and R5 denote 0, NH, or a tertiary amine.

R3 and R4 are straight chain or branched alkylenes having 1-22 carbon atoms, or ethylene oxide having 1-20 repeat units.

R6 denotes a hydrocarbon including aromatic hydrocarbons or a perfluoroalkylene group having 1-22 carbon atoms.

k denotes an integer 0-6, n, m, and q denote

15 positive integers, and "sugar" denotes a

polysaccharide.

3. A method for manufacturing a polysaccharide having phosphorylcholine groups wherein the aldehyde derivative-containing compound obtained by the

oxidative ring-opening reaction of glycerophosphorylcholine is added to a polysaccharide containing amino groups.